ABSTRACT OF THE DISCLOSURE

A multi-mode laser-based bar code symbol reading device having a hand-supportable housing with a light transmission aperture, wherethrough visible light can exit and enter the hand-supportable housing. A laser scanning engine, disposed within the hand-supportable housing, is controlled to selectively operate in either an omni-directional reading mode or a uni-directional bar code reading mode. In the omni-directional bar code reading mode, the laser scanning engine projects pattern through the light transmission aperture, an omni-directional laser scanning pattern producing multiple laser scanning lines with substantially uniform spatial and temporal intensity characteristics at any given scanning plane parallel to the light transmission aperture within the working distance of the system, and detects and decodes bar code symbols on objects passing through the omni-directional scanning pattern, and produces symbol character data representative of decoded bar code symbols. In the uni-directional bar code reading mode, the laser scanning engine projects through the light transmission aperture, a visible stroboscopically-pulsed omni-directional laser scanning pattern, against a single laser scanning line having substantially uniform spatial and temporal intensity characteristics at any given scanning plane parallel to the light transmission aperture within the working distance of the system, and detects and decodes bar code symbols on objects passing through the single laser scanning line, and produces symbol character data representative of decoded bar code symbols. A manually-actuatable data transmission switch, integrated with said hand-supportable housing, produces an activation signal in response to the manual-actuation of the data transmission switch. A data transmission subsystem, disposed in the hand-supportable housing, operates under control of control circuitry to communicate the symbol character data produced by the laser scanning engine to a host device operably coupled to the bar code symbol reading device. The control circuitry enables communication of symbol character data produced by the laser scanning engine in the uni-directional bar code reading mode of operation to the host device in response to the activation signal produced by the data transmission switch, and the control circuitry enables communication of symbol character data produced by the laser scanning engine in the omni-directional reading mode of operation to the host device irrespective of the activation signal produced by the data transmission switch.